

THE UNIVERSITY OF CHICAGO
CHICAGO 37 • ILLINOIS
INSTITUTE OF RADIOBIOLOGY AND BIOPHYSICS

21st May '52

Dear Josh,

Thanks for the Keffert ref. - Yes
I had missed it.

I have just seen Leonard Lerman
who I know you met here with Novick — he
tells me he is going to marry & he is
going to marry into a genetical family — Miss
Lindgren!.

Teaching in the college has taken
up most of my time this year but I have
run across something which I think should be
followed up. I was operating on some dikaryons
as Harder did years ago to separate the two
monokaryons. My ~~two~~ dikaryon was $A'B's m^+ \times AB's m^+$

being the morph. mutant streak σ m' a uroclon.
I was looking for cytoplasmic effects or delay in gene
expression σ this I did not get - or rather I think
I have something of the sort but in a very curious
way. One of the successful operations gave rise
to a monokaryon which was very very dwarf. This,
phenotype ~~at~~ d', crossed with wild type gave rise
to wild type, streak (σ), d' and two new phenotypes
d σ s'. d proved to be a new single gene
mutant σ d' was the double mutant sd, so that
all that had happened was that ~~at~~ the outcome of
the operation was a new mutant d in the nucleus
A'B's m⁺. But what about streak (σ) which
should segregate out σ what about the s' mycelia?
well s' when crossed with wild type segregates
 σ σ + perfectly normally, σ furthermore s'
actually sectors into σ more or less randomly with
an average of something less than 1 sector per plate.
I don't think this can be regarded as a genic change
of $\sigma \rightarrow s' \rightarrow \sigma$ back again but I think it must be a
non-genic change, the two alternatives being rather stable
through several hundred cell divisions. ^{it is not a virus.} Yours Harry